## Abstract of the Disclosure:

A battery sensor has a current meter, an analytical unit, and a microprocessor. During an idle phase, in which the electrical main user, provided with a battery, is switched off, the following steps are carried out. The microprocessor is switched off. At given intervals the measured signal from the current meter is recorded for a given first duration by the analytical unit and allocated first current values which are monitored in the analytical unit for exceeding a first current threshold or dropping below a second current threshold. On exceeding or dropping below the current thresholds, the microprocessor is switched on and, for a given second duration, the measured signal from the current meter is recorded by the analytical unit and allocated second current values which are then analysed in the microprocessor. Procedures for obtaining the electrical charge of the battery by the microprocessor are initiated when a given condition is met, which is dependent on the second current values. The first duration is set smaller than the second duration.